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Boby Joseph

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Monika Dudek
McDonnell Boehnen Hulbert & Berghoff
32nd Floor
300 S. Wacker Drive
Chicago, IL 60606

EXAMINER

KADING, JOSHUA A

ART UNIT

PAPER NUMBER

2661

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/837,106

Applicant(s)

JOSEPH ET AL.

Examiner

Joshua Kading

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-23 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities:

Claim 1, lines 4 and 14 state, "the plurality of hosts sharing" and "the plurality of
5 hosts using" respectively. For consistency, it is suggested lines 4 and 14 be changed to
--the plurality of hosts of the second network sharing-- and --the plurality of hosts on the
second network using-- respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 103

10 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

15 (a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negated by the manner in which the invention was made.

20 Claims 1, 3, 5-17, 20 and 22 are rejected under 35 U.S.C. 103(a) as being
unpatentable over U.S. Patent 6,693,878 B1, Daruwalla et al. (Daruwalla).

Regarding claim 1, Daruwalla discloses "a method for routing information
between a first host on a first network and a plurality of hosts on a second network, the
method comprising:

25 establishing a routing path between the first host on the first network and one of
the plurality of hosts on the second network (figure 3, elements 302, 304, 306, 308, and

310 all act as nodes in network 330, elements 352 and 362 act as access points for the nodes in their respective enterprises, and elements 311 and 313 are the established paths between the nodes in network 330 and the enterprises), the plurality of host on the second network sharing a globally-routable network address (col. 12, lines 27-31

5 where the hosts all share the globally-routable network address associated with their respective VPN);

establishing a routing table comprising a plurality of physical network addresses for the plurality of hosts on the second network, each of the plurality of physical network addresses associated with a respective unique identifier (col. 12, lines 27-62 the MAC
10 addresses are the physical network addresses and each is associated with a unique sub-interface identifier)..."

However, Daruwalla explicitly lacks "receiving a message from the first host, the message comprising a destination identifier associated with one of the unique identifiers; determining a physical network address in the routing table using the
15 destination identifier; mapping the physical network address to the message; and routing the message to one of the plurality of hosts using the physical network address."

Although Daruwalla does not disclose, explicitly, the deficiencies set forth above, Daruwalla does disclose the "reverse" of the steps above:

"Receiving a message from the first host, the message comprising a destination
20 identifier associated with one of the unique identifiers (col. 13, lines 31-54 where if the network can create a message with an identifier, then it must be able to receive a message with an identifier for routing to its destination and as read in col. 12, lines 27-

62 these sub-interface identifiers are unique); determining a physical network address in
the routing table using the destination identifier (col. 13, lines 31-54 where if the
physical network address was used to associate the message with an identifier, then
the identifier can be used to associate the message with a physical network address);
5 mapping the physical network address to the message (col. 13, lines 31-54 where to be
routed to its final destination within the network, the physical network address must be
known and that information is stored in the table associating the identifier with the
physical network address); and routing the message to one of the plurality of hosts
using the physical network address (col. 13, lines 31-54 where the message is finally
10 sent to its final destination)."

The steps disclosed in Daruwalla are the "reverse" of what is claimed by
applicant. However, there is no reason to assume that the communication system in
Daruwalla operates in a unidirectional manner. If it sends data, such as requests for
information, in a processed form, it must be able to receive data in the same processed
15 form and convert it back to useful information.

It would have been obvious to one with ordinary skill in the art at the time of
invention to have the data link layer identifier and address associated and used for
routing of data for the purpose of routing messages between nodes using virtual private
networks (Daruwalla, col. 4, lines 40-48). The motivation for using virtual private
20 networks is that they can allow messages to be transmitted within the virtual network
thus saving processing time and resources.

Regarding claim 3, Daruwalla discloses the method of claim 1. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 1, Daruwalla further discloses "the routing path comprises a multiprotocol label switched path (col. 13, lines 21-26)." It would have been obvious to one with ordinary skill in the art to have the routing path comprise a multiprotocol label switching path for the same reasons and motivation as in claim 1.

Regarding claim 5, Daruwalla discloses the method of claim 3. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 3, Daruwalla further discloses "the destination identifier comprises a multiprotocol label (col. 13, lines 45-47)." It would have been obvious to one with ordinary skill in the art to have the identifier comprise a multiprotocol label for the same reasons and motivation as in claim 3.

Regarding claim 6, Daruwalla discloses the method of claim 1. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 1, Daruwalla further discloses "the physical network address comprises a medium access control address (col. 11, lines 37-43 where the MAC addresses are data link layer addresses)." It would have been obvious to one with ordinary skill in the art to have the address comprise a MAC address for the same reasons and motivation as in claim 1.

Regarding claim 7, Daruwalla discloses the method of claim 1. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 1, Daruwalla further discloses "the destination identifier is created during the step of establishing the routing path from the first host on the first network to the one of the plurality of hosts on the second network (col. 13, lines 31-54 where to be routed to its final destination within the network, the destination identifier must be known and that information is stored in the table associating the identifier with the physical network address, thus the identifier is used to "create" the physical network address for further routing of the message)." It would have been obvious to one with ordinary skill in the art to have the physical network address created for the same reasons and motivation as in claim 1.

Regarding claim 8, Daruwalla discloses "a system for routing messages, comprising in combination:

15 a local routing table comprising a plurality of physical network addresses and a unique identifier associated with each of the plurality of physical network addresses (col. 12, lines 27-62 the MAC addresses are the physical network addresses and each is associated with a unique sub-interface identifier);

20 a host on a first network (figure 3, elements 302, 304, 306, 308, and 310 all act as hosts);

a plurality of local hosts on a second network, the plurality of local hosts having the plurality of physical network addresses and sharing a globally-routable network

Art Unit: 2661

address (figure 3, elements 352 and 362 act as access points for the nodes in their respective enterprises and it is reasonable to assume that these enterprises have more than one node associated with them; further as with nodes 302, 304, 306, 308, and 310, the nodes of the second network must have physical network addresses as read in col. 12, lines 27-62 the MAC addresses are the physical network addresses, further figure 6 shows that several of the MAC addresses, such as those identified by their VPN's in figure 7, share the VPN address, in other words they all have a globally-routable network address)..."

However, Daruwalla explicitly lacks "a local processing module for determining a physical network address upon a receipt of a message comprising a destination identifier from the host on the first network, wherein the local processing module determines the physical network address based on the destination identifier using the local routing table, the destination identifier is associated with the unique identifier, and transmitting the message to one of the plurality of hosts on the second network using the physical network address."

Although Daruwalla does not disclose, explicitly, the deficiencies set forth above, Daruwalla does disclose the "reverse" of the function of the module above:

"A local processing module (figure 3, element 322) for determining a physical network address upon a receipt of a message comprising a destination identifier from the host on the first network (col. 13, lines 31-54 where if the network can create a message with an identifier, then it must be able to receive a message with an identifier for routing to its destination), wherein the local processing module determines the

physical network address based on the destination identifier using the local routing table (col. 13, lines 31-54 where if the physical network address was used to associate the message with an identifier, then the identifier can be used to associate the message with a physical network address), the destination identifier is associated with the unique
5 identifier (col. 12, lines 27-62 where the destination identifiers are associated with the unique sub-interface identifiers), and transmitting the message to one of the plurality of hosts on the second network using the physical network address (col. 13, lines 31-54 where the message is finally sent to its final destination)."

The function of the module disclosed in Daruwalla is the "reverse" of what is
10 claimed by applicant. However, there is no reason to assume that the communication system in Daruwalla operates in a unidirectional manner. If it sends data, such as requests for information, in a processed form, it must be able to receive data in the same processed form and convert it back to useful information.

It would have been obvious to one with ordinary skill in the art at the time of
15 invention to have the data link layer identifier and address associated and used for routing of data for the purpose of routing messages between nodes using virtual private networks (Daruwalla, col. 4, lines 40-48). The motivation for using virtual private networks is that they can allow messages to be transmitted within the virtual network thus saving processing time and resources.

20
Regarding claim 9, Daruwalla discloses the system of claim 8. Although Daruwalla does not explicitly disclose the deficient function of the module of claim 8,

Daruwalla further discloses "the plurality of physical network addresses comprises a plurality of medium access control network addressees (col. 11, lines 37-43 where the MAC addresses are data link layer addresses), and the globally-routable network layer address comprises an Internet Protocol address (figure 6 shows that several MAC
5 addresses, such as those identified by their VPN's in figure 7, share an IP address, in other words they all have a globally-routable network layer address)." It would have been obvious to one with ordinary skill in the art to have the physical network addresses be MAC addresses and the global-routable address consist of an IP address for the same reasons and motivation as in claim 8.

10

Regarding claim 10, Daruwalla discloses "the system of claim 8, wherein the identifiers comprise multi-protocol label switching labels (col. 13, lines 45-47)." It would have been obvious to one with ordinary skill in the art to have the identifier comprise a multiprotocol label for the same reasons and motivation as in claim 8.

15

Regarding claim 11, Daruwalla discloses "a method for transmitting data, the method comprising:

establishing a routing path from a first host on a first network to a second host on a second network (figure 3, elements 302, 304, 306, 308, and 310 all act as nodes in
20 network 330, elements 352 and 362 act as access points for the nodes in their respective enterprises, and elements 311 and 313 are the established paths between the nodes in network 330 and the enterprises), the second host comprising a unique

data link layer address (col. 11, lines 37-43) and sharing a globally-routable network layer address with a plurality of hosts on the second network (figure 6 shows that several MAC addresses, such as those identified by their VPN's in figure 7, share the VPN address, in other words they all have a globally-routable network address);

- 5 allocating a destination identifier for the data link layer address associated with the second host (col. 12, lines 40-62 where figure 7 makes reference to the SID, but as read in lines 60-62 the MAC address may be used instead of the SID to make associations in the table, therefore these SID's function as a data link layer destination identifier);
- 10 storing the destination identifier with the data link layer address associated with the second host in a routing table (col. 12, lines 40-62), the routing table comprising a plurality of data link layer addresses associated with the plurality of hosts on the second network, wherein each of the plurality of data link layer addresses is associated with a unique destination identifier (col. 12, lines 27-62 where it is stated here that the sub-
- 15 interface identifier is unique)...”

- However, Daruwalla explicitly lacks “receiving a message from the first host on the first network, the message comprising the destination identifier; determining the data link layer address based on the received destination identifier using the routing table; mapping the data link layer address to the message; and routing the message to the
- 20 second host using the data link layer address determined based on the destination identifier received in the message.”

Although Daruwalla does not disclose, explicitly, the deficiencies set forth above, Daruwalla does disclose the "reverse" of the steps above:

5 "Receiving a message from the first host on the first network, the message comprising the destination identifier (col. 13, lines 31-54 where if the network can create a message with a destination identifier, then it must be able to receive a message with a data link layer identifier for routing to its destination); determining the data link layer address based on the received data link layer identifier using the routing table (col. 13, lines 31-54 where if the data link address was used to associate the message with a destination identifier, then the destination identifier can be used to associate the message with a data link address); mapping the data link layer address to the message (col. 13, lines 31-54 where to be routed to its final destination within the network, the data link layer address must be known and that information is stored in the table associating the data link layer identifier with the data link address); and routing the message to the second host using the data link layer address determined based on the destination identifier received in the message (col. 13, lines 31-54 where the message is finally sent to its final destination)."

The steps disclosed in Daruwalla are the "reverse" of what is claimed by applicant. However, there is no reason to assume that the communication system in Daruwalla operates in a unidirectional manner. If it sends data, such as requests for information, in a processed form, it must be able to receive data in the same processed form and convert it back to useful information.

It would have been obvious to one with ordinary skill in the art at the time of invention to have the data link layer identifier and address associated and used for routing of data for the purpose of routing messages between nodes using virtual private networks (Daruwalla, col. 4, lines 40-48). The motivation for using virtual private
5 networks is that they can allow messages to be transmitted within the virtual network thus saving processing time and resources.

Regarding claim 12, Daruwalla discloses the method of claim 11. The embodiment of claim 11 is not realized on a computer readable medium as an
10 executable program as described in the above referenced columns. However, Daruwalla does disclose that all of the embodiments are capable of being executed on a computer readable medium (col. 18, lines 59-col. 19, lines 1-20). It would have been obvious to one with ordinary skill in the art at the time of invention to have the method of claim 11 stored on a computer readable medium as an executable program for the
15 purpose of performing the processes involved in manipulating electronic (or optical) sources of data. The motivation for using a computer program to manipulate electronic data is that the computer is the only practical and efficient way of processing electric signals.

20 Regarding claim 13, Daruwalla discloses the method of claim 11. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 11, Daruwalla further discloses "the routing path comprises a label switching

path (col. 13, lines 21-26).” It would have been obvious to one with ordinary skill in the art to have the routing path comprise a label switching path for the same reasons and motivation as in claim 11.

5 Regarding claim 14, Daruwalla discloses the method of claim 11. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 11, Daruwalla further discloses “the data link layer identifiers comprise multi-protocol label switching labels (col. 13, lines 45-47).” It would have been obvious to one with ordinary skill in the art to have the identifier comprise a multiprotocol label for the
10 same reasons and motivation as in claim 11.

 Regarding claim 15, Daruwalla discloses the method of claim 11. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 11, Daruwalla further discloses “the data link layer addresses comprises medium access
15 control addresses (col. 11, lines 37-43 where the MAC addresses are data link layer addresses), and the globally-routable network layer address comprises an Internet Protocol address (figure 6 shows that several MAC addresses, such as those identified by their VPN’s in figure 7, share an IP address, in other words they all have a globally-routable network layer address).” It would have been obvious to one with ordinary skill
20 in the art to have the data link layer addresses be MAC addresses and the global-routable address consist of an IP address for the same reasons and motivation as in claim 11.

Regarding claim 16, Daruwalla discloses the method of claim 11. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 11, Daruwalla further discloses "the message comprises Voice over Internet Protocol packet (col. 1, lines 24-29 where Daruwalla suggests that the message transmitted over the cable modem network of claim 11 can consist of voice is transmitted using IP addresses)." It would have been obvious to one with ordinary skill in the art to have the message consist of a VoIP message for the same reasons and motivation as in claim 11.

Regarding claim 17, Daruwalla discloses "a system for routing messages, comprising in combination;

a centralized routing module (figure 3, element 322 acts as the central module for routing and table maintenance) for generating a routing table for a switch module associated with a plurality of network entities sharing a globally-routable network address (figure 6 shows that several MAC addresses, such as those identified by their VPN's in figure 7, share the VPN address, in other words they all have a globally-routable network address), the routing table comprising (i) a plurality of physical network addresses associated with the plurality of network entities (col. 12, lines 40-62 where the MAC addresses (which are represented by the SID column in the table as per lines 60-62) are the physical network addresses each corresponding to a separate network entity), and (ii) a respective unique identifier associated with each physical network

address is associated with an identifier (col. 12, lines 27-62 where the unique sub-interface identifier acts as the identifier associated with the MAC address)..."

However, Daruwalla explicitly lacks "the switch module for receiving a data packet addressed to the globally-routable network address, the data packet comprising a destination identifier associated with one of the unique identifiers, the switch module determining a destination physical network address by mapping the destination identifier to one of the plurality of physical network addresses in the routing table and routing the data packet to a network entity associated with the determined physical network address."

Although Daruwalla does not disclose, explicitly, the deficiencies set forth above, Daruwalla does disclose the "reverse" of the switch function above:

"The switch module for receiving a data packet addressed to the globally-routable network address, the data packet comprising a destination identifier associated with one of the unique identifiers (col. 13, lines 31-54 where if the network can create a message with a data link layer identifier, then it must be able to receive a message with a data link layer identifier for routing to its destination and as read in col. 12, lines 27-62 these sub-interface identifiers are unique), the switch module determining a destination physical network address by mapping the destination identifier to one of the plurality of physical network addresses in the routing table (col. 13, lines 31-54 where if the data link address was used to associate the message with a data link layer identifier, then the data link layer identifier can be used to associate the message with a data link address) and routing the data packet to a network entity associated with the determined

physical network address (col. 13, lines 31-54 where the message is finally sent to its final destination)."

The function disclosed in Daruwalla is the "reverse" of what is claimed by applicant. However, there is no reason to assume that the communication system in
5 Daruwalla operates in a unidirectional manner. If it sends data, such as requests for information, in a processed form, it must be able to receive data in the same processed form and convert it back to useful information.

It would have been obvious to one with ordinary skill in the art at the time of invention to have the data link layer identifier and address associated and used for
10 routing of data for the purpose of routing messages between nodes using virtual private networks (Daruwalla, col. 4, lines 40-48). The motivation for using virtual private networks is that they can allow messages to be transmitted within the virtual network thus saving processing time and resources.

15 Regarding claim 20, Daruwalla discloses the system of claim 17. Although Daruwalla does not explicitly disclose the deficient function of the switch module of claim 17, Daruwalla further discloses "the centralized routing module aggregates at least one data flow associated with each of the plurality of network entities to a destination identifier (figure 7 shows the identifiers in column 712 which are to be
20 associated with data flows as seen in figure 3A for example)." It would have been obvious to one with ordinary skill in the art to have the identifiers associated with data flows for the same reasons and motivation as in claim 17.

Regarding claim 22, Daruwalla discloses the system of claim 17. Although Daruwalla does not explicitly disclose the deficient function of the switch module of claim 17, Daruwalla further discloses "upon the allocation of the identifier for each
5 network host, a routing path is created for each host (since figure 7 shows the associations between the MAC addresses, or each host, and the identifiers, and figure 3A suggests that each identifier has its own path, it is reasonable to assume that the routing path for each host is thusly created when assigned with a particular identifier)." It would have been obvious to one with ordinary skill in the art to have a routing path for
10 each host for the same reasons and motivation as in claim 17.

Claims 4 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daruwalla et al. in view of Raj et al.

15 Regarding claim 4, Daruwalla discloses the method of claim 3. However, Daruwalla lacks what Raj discloses, "the label switched path is established using a Resource Reservation Protocol (col. 4, lines 44-52)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the Resource Reservation Protocol with the method of claim 3 for the purpose of allowing the switch to be
20 controlled so that the data can be routed (Raj, col. 4, lines 48-52). The motivation for wanting to control a switch for routing is that the resources for the switch can be allocated to for the data wanting to be transmitted, this ensures delivery of the data.

Regarding claim 21, Daruwalla discloses the system of claim 17. However, Daruwalla lacks what Raj discloses, "the centralized routing module allocates an identifier for each network host upon a receipt of a Resource Reservation Protocol message for each network host (col. 4, lines 44-52)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the Resource Reservation Protocol with the system of claim 17 for the purpose of allowing the switch to be controlled so that the data can be routed (Raj, col. 4, lines 48-52). The motivation for wanting to control a switch for routing is that the resources for the switch can be allocated to for the data wanting to be transmitted, this ensures delivery of the data.

Claims 18, 19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daruwalla et al. in view of U.S. Patent 6,510,135 B1, Almulhem et al. (Almulhem).

15

Regarding claim 18, Daruwalla discloses the system of claim 17. Daruwalla further discloses, "the destination identifier comprises a data link layer identifier (col. 12, lines 40-62 where the MAC addresses (which are represented by the SID column in the table as per lines 60-62) are the data link layer addresses which are identified by the VPN, therefore the VPN associates with a data link layer identifier)." However, Daruwalla lacks what Almulhem discloses, "wherein each of the unique identifiers comprises a transport layer identifier...the transport layer identifier is an identifier

Art Unit: 2661

selected from the group consisting of (i) a UDP port identifier, (ii) a TCP port identifier, and (iii) and ICMP query identifier (col. 8, lines 9-12 where it is further well known in the art that IP is used with TCP or UDP for network communications).” It would have been obvious to one with ordinary skill in the art to include the TCP identifier, as is well known in the art, for the purpose of providing a means for flow control during transmission. The motivation for using flow control is to avoid congestion.

Regarding claim 19, Daruwalla and Almulhem disclose the system of claim 18. However, Almulhem lacks what Daruwalla further discloses “the data link layer identifier comprises a multi-protocol label switching label (col. 13, lines 45-47).” It would have been obvious to one with ordinary skill in the art to have the identifier comprise a multiprotocol label for the same reasons and motivation as in claim 18.

Regarding claim 23, Daruwalla discloses the method of claim 1. However, Daruwalla lacks what Almulhem discloses, “wherein each of the unique identifiers is a transport identifier, and each transport identifier is an identifier selected from the group consisting of (i) a User Data Protocol port identifier, (ii) a Transmission Control Protocol port identifier, and (iii) an Internet Control Message Protocol query identifier (col. 8, lines 9-12 where it is further well known in the art that IP is used with TCP or UDP for network communications).” It would have been obvious to one with ordinary skill in the art to include the TCP identifier, as is well known in the art, for the purpose of providing

a means for flow control during transmission. The motivation for using flow control is to avoid congestion.

Response to Arguments

5 Applicant's arguments, see REMARKS, page 12, section 3, filed 8 November 2004, with respect to the objections of claims 17, 18, and 20 have been fully considered and are persuasive. The objections of claims 17, 18, and 20 have been withdrawn.

10 Applicant's arguments, see REMARKS, page 12, section 4, filed 8 November 2004, with respect to the 35 U.S.C. 112, second paragraph rejection of claim 7 have been fully considered and are persuasive. The 35 U.S.C. 112, second paragraph rejection of claim 7 has been withdrawn.

15 Applicant's arguments filed 8 November 2004 have been fully considered but they are not persuasive.

 Regarding claims 1, 3, 5-20, and 22, applicant argues that Daruwalla does not read on the claimed invention because Daruwalla lacks "a globally-routable network address". The examiner respectfully disagrees.

20 As stated in the rejection, Daruwalla discloses a VPN that a variety of users fall under. This can be further seen in figure 3 of Daruwalla where elements 304, 306, for instance, all fall under VPN1. Therefore, the VPN is a globally-routable network address that different users share.

Regarding claims 4 and 21, applicant argues that Daruwalla in view of Raj fails to make a *prima facie* case of obviousness because neither Daruwalla nor Raj disclose "a globally-routable network address." The examiner respectfully disagrees.

As argued for claims 1, 3, 5-20, and 22, Daruwalla fully discloses "a globally-routable network address" and therefore, Daruwalla in view of Raj make the required *prima facie* case of obviousness for a 35 U.S.C. 103 rejection.

Conclusion

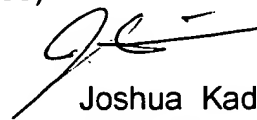
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading
Examiner
Art Unit 2661

15
March 8, 2005



BOB PHUNKULH
PRIMARY EXAMINER